

AMENDMENTS TO THE SPECIFICATION

After the Title of the invention, and before the section heading, "Field of the Invention", please add the following new paragraph:

--CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims priority under 35 U.S.C. § 120 as a Continuation of U.S. patent appln. no. 09/337,595 filed June 21, 1999, which is a Continuation of U.S. patent appln. no 08/810,332 filed February 27, 1997, now U.S. Patent No. 5,937,851.--

Please replace the paragraph beginning at page 1, line 11, with the following rewritten paragraph.

--The present invention relates to providing a respiratory mask with a two-piece swivel conduit ~~which~~that uses the rotating bearing of its swivel design to permit and preferably direct carbon dioxide (CO.sub.2) laden exhaust from the patient breathing circuit.--

Please replace the paragraph beginning at page 1, line 11, with the following rewritten paragraph.

--A variety of delivery systems are known ~~which are designed to~~that deliver gas at positive pressure for consumption by the user. The uses and applications of such systems vary. Some such systems have been developed for the treatment of sleep apnea.--

Please replace the paragraph beginning at page 1, line 16, with the following rewritten paragraph.

--Sleep apnea syndrome is ~~due to an~~an episodic upper airway obstruction during sleep. As a consequence, there is repeated interruption of sleep in the patient. Positive airway pressure (PAP) devices have been developed to treat this disorder. A typical PAP device

comprises a flow generator (e.g., a blower) which delivers gas via a delivery conduit to a patient interface, such as a mask.--

Please replace the paragraph beginning at page 1, line 23, with the following rewritten paragraph.

--~~The prior art includes~~ Several types of respiratory face masks for delivering gas to a patient are known. One ~~prior art~~ such mask incorporates ports in the body of the mask to provide an exhaust leak to purge the system of CO₂ laden air. However, several drawbacks ~~have been found to be~~ are associated with ports in the body of the mask. For example, air exiting the mask ports may create noise or blow on the patient, causing discomfort.--

Please replace the paragraph beginning at page 2, line 7, with the following rewritten paragraph.

--Respironics, Inc. of Murrysville, Pa. has developed and manufactured a swivel conduit having exhaust vents under the name Whisper Swivel[®] Exhalation Port. See FIG. 1a. This ~~prior art~~ two-piece swivel conduit not only provides a swivel connection between the mask and the delivery conduit but also includes a plurality of downwardly directed exhaust slits. The slit configuration of the vents acts to reduce noise and direct the CO₂ laden exhaust away from the patient.--

Please replace the paragraph beginning at page 2, line 17, with the following rewritten paragraph.

--The improved swivel conduit rotatably connects a patient mask to the delivery conduit of the present invention of a positive pressure air supply. The improved design provides an exhaust vent for purging the system of CO₂ laden air that utilizes the rotating bearing of its two-piece design. A baffle chamber in the design reduces the intensity of the sound generated. As CO₂ laden exhaust exits the swivel conduit, it is directed away from the patient mask and down

the outside of the delivery conduit via a slit pattern on the swivel conduit. The unique two-piece bearing design may be easily disassembled for cleaning.--

Please replace the paragraph beginning at page 3, line 1, with the following rewritten paragraph.

--The swivel conduit design directs CO₂ laden expiratory exhaust away from the patient in a diffused air flow stream along the delivery conduit. This diffused air flow provides for a less perceptible sensation to the patient or his sleeping partner.--

Please replace the paragraph beginning at page 3, line 12, with the following rewritten paragraph.

--FIG. 1a is an exploded perspective view of ~~the prior art~~ a Whisper Swivel[®] device assembled with a respiratory mask and delivery conduit;--

Please replace the paragraph beginning at page 4, line 18, with the following rewritten paragraph.

--There is generally indicated at 10 in FIG. 1 a swivel conduit of ~~the prior art~~ a conventional Whisper Swivel[®] Exhalation Port device manufactured by Respironics, Inc. Swivel conduit 10 has a mask connection piece 12, which is received within one end of an L-shaped conduit 14 attached to a respiratory mask 16, and a delivery conduit piece 18, which is received within one end of a delivery conduit 20, ~~which delivers~~ to deliver pressurized air from a positive airway pressure device or other ventilatory device (not shown). A plurality of parallel slits 22 on the mask connection piece 12 are directed downwardly towards the delivery conduit end 24 of the swivel conduit 10 to permit purging of CO₂ laden expiratory exhaust. The mask connection piece 12 and the delivery conduit piece 18 are rotatably coupled to each other, thus, allowing the mask 16 to rotate relative to the delivery conduit 20.--

Please replace the paragraph beginning at page 5, line 8, with the following rewritten paragraph.

--FIGS. 1b, 2, 3 and 4 illustrate a first embodiment of an improved swivel exhaust~~the improved Whisper Swivel~~[®] device 100. The improved two-piece design has a mask connection piece 112, which is received within one end of an L-shaped mask conduit 14, and a delivery conduit piece 114, which is received within one end of the delivery conduit 20. The mask connection piece 112 and the delivery conduit piece 114 are rotatably coupled to each other. Discharge of CO₂ laden expiratory exhaust is permitted through the clearance 116 between the mask connection piece 112 and the delivery conduit piece 114.--

Please replace the paragraph beginning at page 6, line 19, with the following rewritten paragraph.

--The delivery conduit piece 114 includes a tapered delivery conduit 136 end, which is received within the delivery conduit 20, and a swivel connection end 138, which is rotatably received within the mask connection end 118 of the mask connection piece 112. The swivel connection end 138 preferably has four longitudinal slots 140 forming four retaining arms 142, 144. Two of the retaining arms 144 ~~that~~ which are opposite each other preferably are longer than the other two retaining arms 142. All four arms 142, 144 have radial outwardly projecting segments 146 to retain the delivery conduit piece 114 within the mask connection piece 112. By pressing inwardly on the radial segments 146 of the two longer retaining arms 144, the mask connection piece 112 and the delivery conduit piece 114 may be easily separated. The delivery conduit piece 114 has a locating portion 148 joining an intermediate stepped portion 150 and the swivel connection end 138, and an exhaust portion 152 disposed between the stepped portion 150 and the delivery conduit end 136. When the two pieces 112, 114 are assembled, the two longer retaining arms 144 form cantilever springs which load, center and locate the sloped portion 124 of the stepped portion of the mask connection piece 112 against the locating portion 148 of the delivery conduit piece 114.--

Please replace the paragraph beginning at page 7, line 26, with the following rewritten paragraph.

--A swivel conduit 200 in accordance with a second embodiment of the present invention is shown in FIG. 5. In this embodiment, the stepped portion of the delivery conduit piece 214 includes a raised baffle ~~252~~250 to reduce noise. In this embodiment, as well as in the embodiments illustrated in FIGS. 6 and 7, the two shorter retaining arms 242 preferably do not have radial segments. Alternately, in an unillustrated embodiment, all retaining arms are the same longer length with the two arms which are pressed inwardly for disassembly having locating notches.--

Please replace the paragraph beginning at page 8, line 7, with the following rewritten paragraph.

--A swivel conduit 300 in accordance with a third embodiment of the present invention is shown in FIG. 6. In this embodiment, spaced radial holes 360 are provided (preferably four) in the stepped portion 350 of the delivery conduit piece 314 ~~which to~~ provide an additional path for CO₂ laden exhaust between the interior of the delivery conduit piece 314 and the baffle chamber 358. Hole bosses 362 protrude inwardly to divert fluids or secretions around the holes. In this embodiment, CO₂ laden exhaust flow is determined by both the holes 360 and the clearance 316 between the mask connection piece 312 and the delivery conduit piece 314.--

Please replace the paragraph beginning at page 9, line 7, with the following rewritten paragraph.

--The present invention provides several advantages over that of the prior art. Its unique design provides optimum comfort through improved exhaust rates and reduced noise. The pieces, which can be formed by injection molding, do not require additional processing, thus reducing manufacturing costs. The two-piece design is easily disassembled for cleaning and

SEROWSKI et al. -- Appln. No.: Not Yet Assigned
(CONT. of U.S. Appln. No. 09/337,595)

discourages exhaust vents from being sealed off. The swivel action also allows for the unplugging of secretions.--